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(54) Title: ENZYMES, CELLS AND METHODS FOR SITE SPECIFIC RECOMBINATION AT ASYMMETRIC SITES

(57) Abstract: The present invention relates to enzymes, compositions and methods for catalyzing asymmetric recombination of non-palindromic recombination sites in a cell free system, in isolated cells or in living organisms. The enzymes and methods of the invention are suitable for mediating specific recombinations between DNA sequences comprising specific recombination sites without being limited to strict palindromic symmetry within each recombination site.